

Figure 2

Figure 3

```
301:      Valid = FALSE;
302:      While (not Valid)
303:      {
304:          XRun.RunPage ("Login.jsp")
305:          Valid = doLogin (Q.Username, Q.Password);
306:      }

305:      S.AccountInfo = getAccount (Q.Username);

306:      XRun.RunPage ("MyAccount.jsp");
```

Figure 4

```
401:      Valid = doLogin (Q.Username, Q.Password);
402:      if (not Valid)
403:      {
404:          DispatchPage ("Login.jsp");
405:      }
406:      else
407:      {
408:          S.AccountInfo = getAccount (Q.Username);
409:          XRun.RunPage ("MyAccount.jsp", "IBAT",
410:                      "AccountLogic", "AccountCheck");
411:      }
```

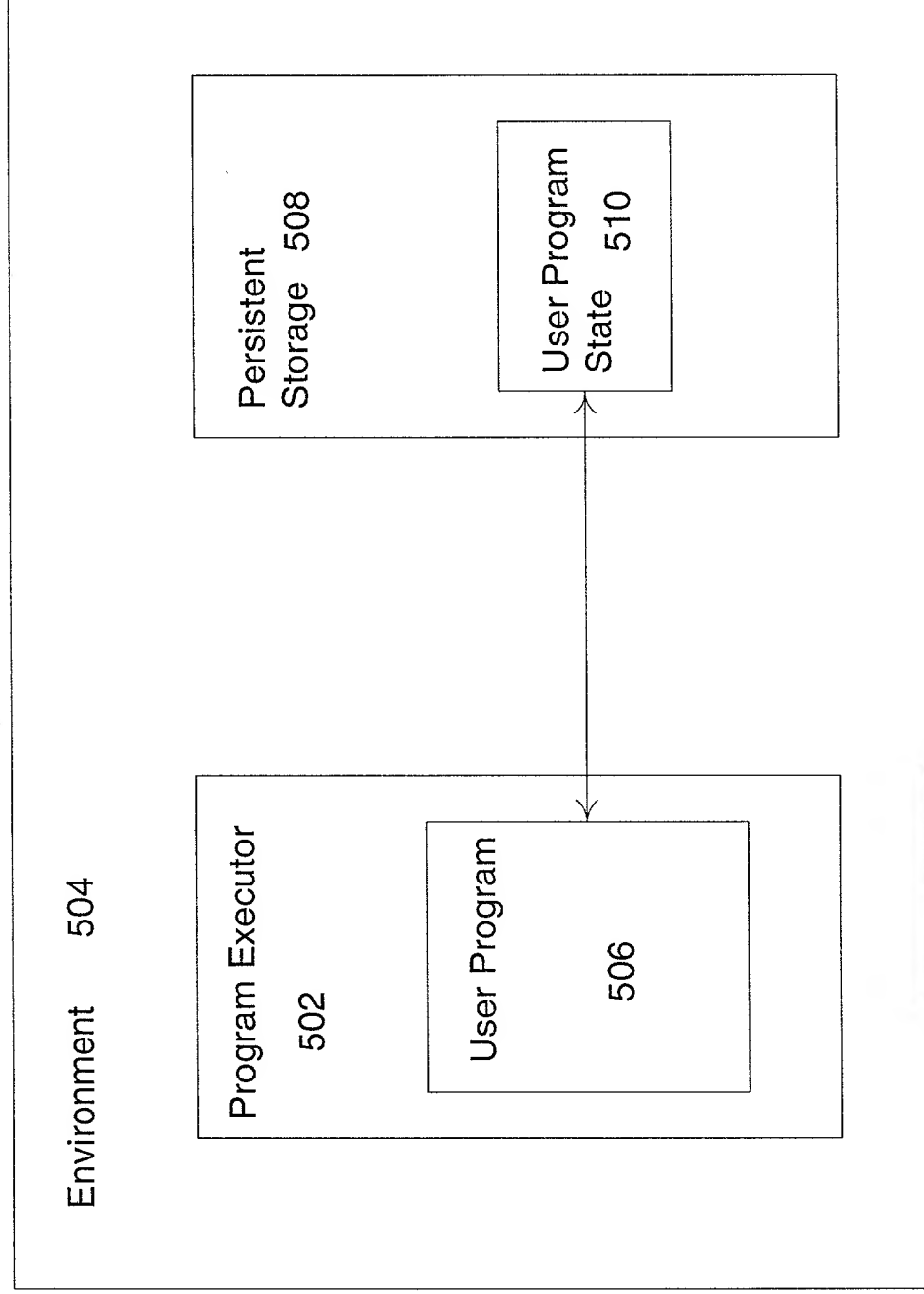


Figure 5

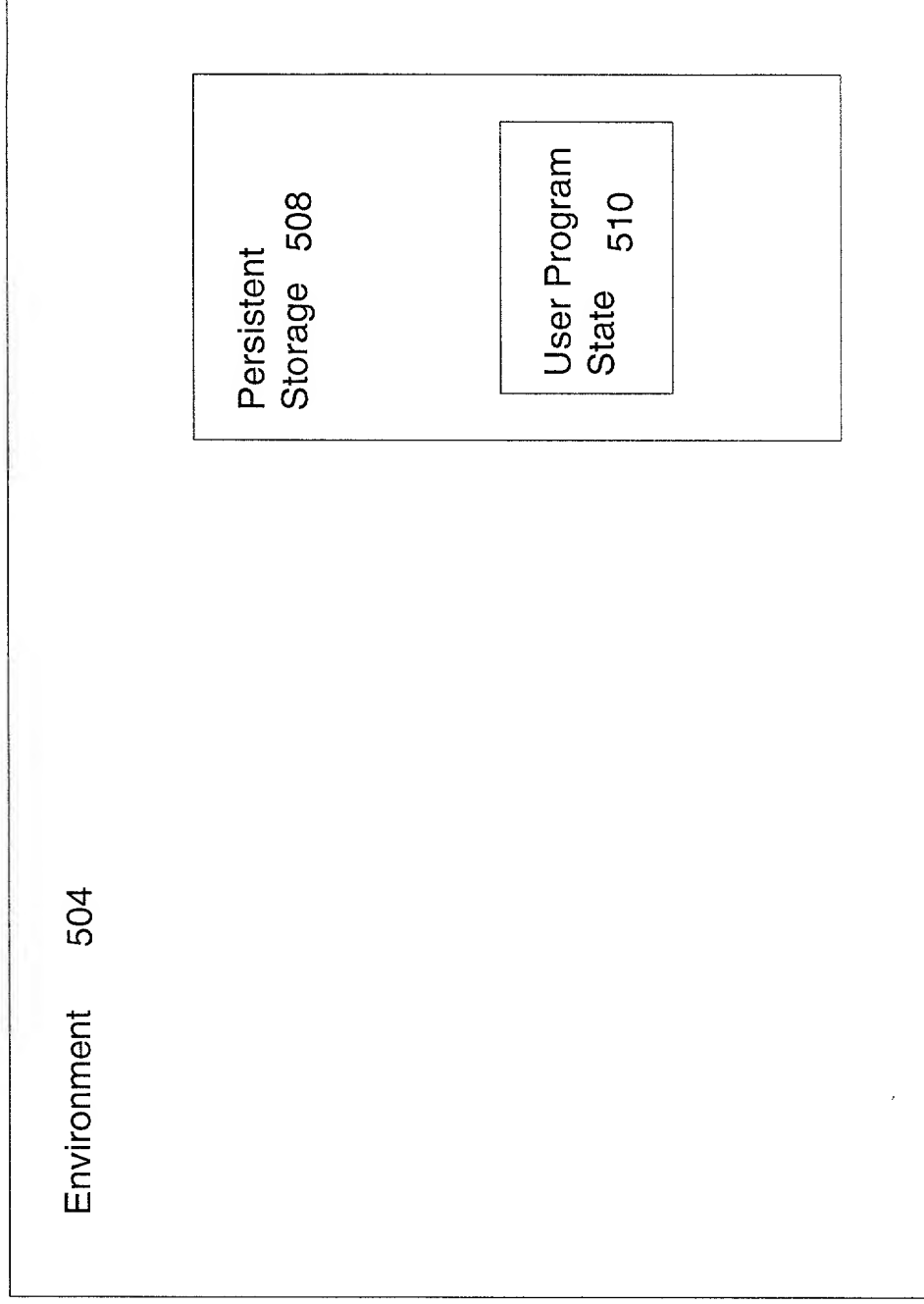


Figure 6

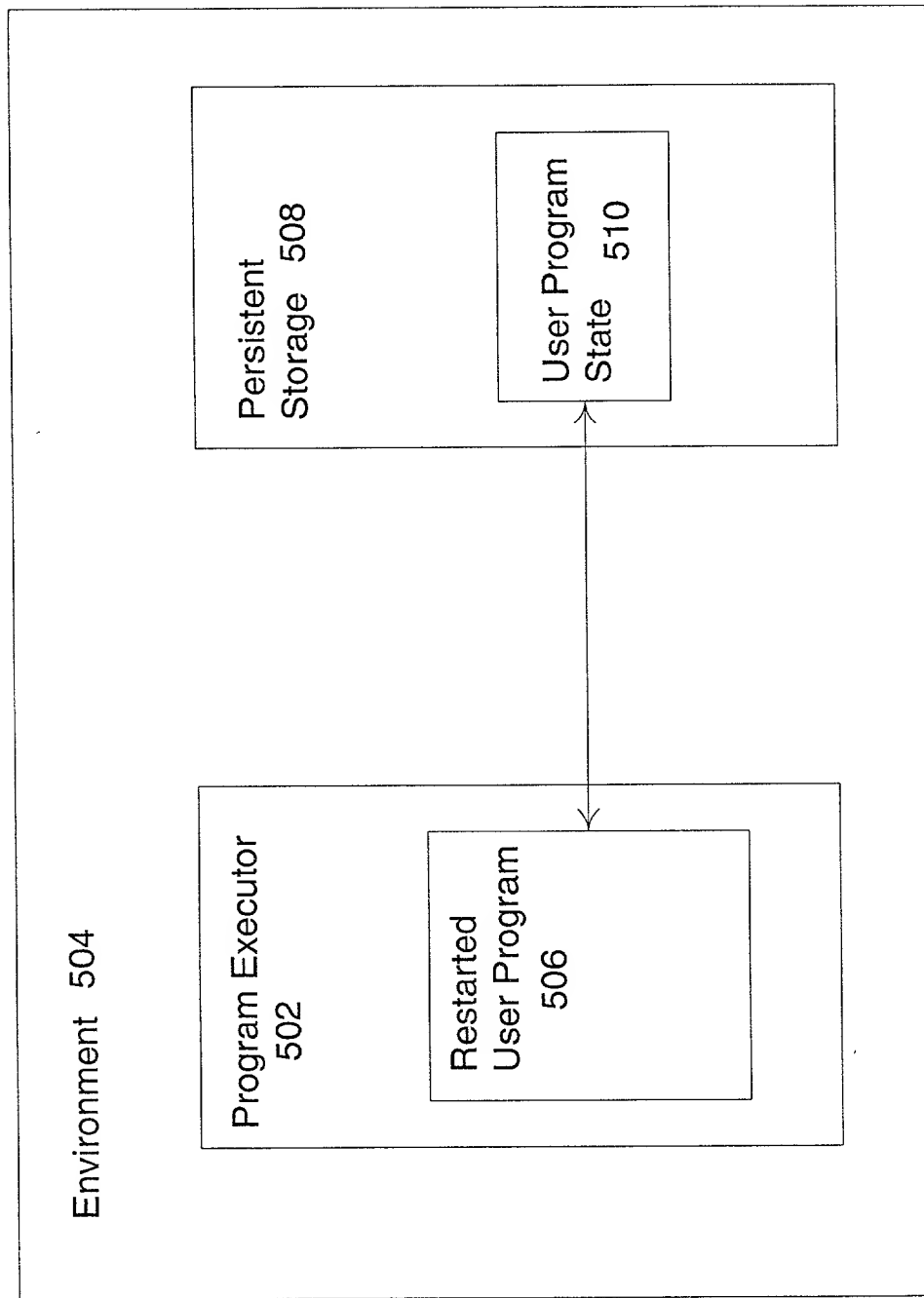
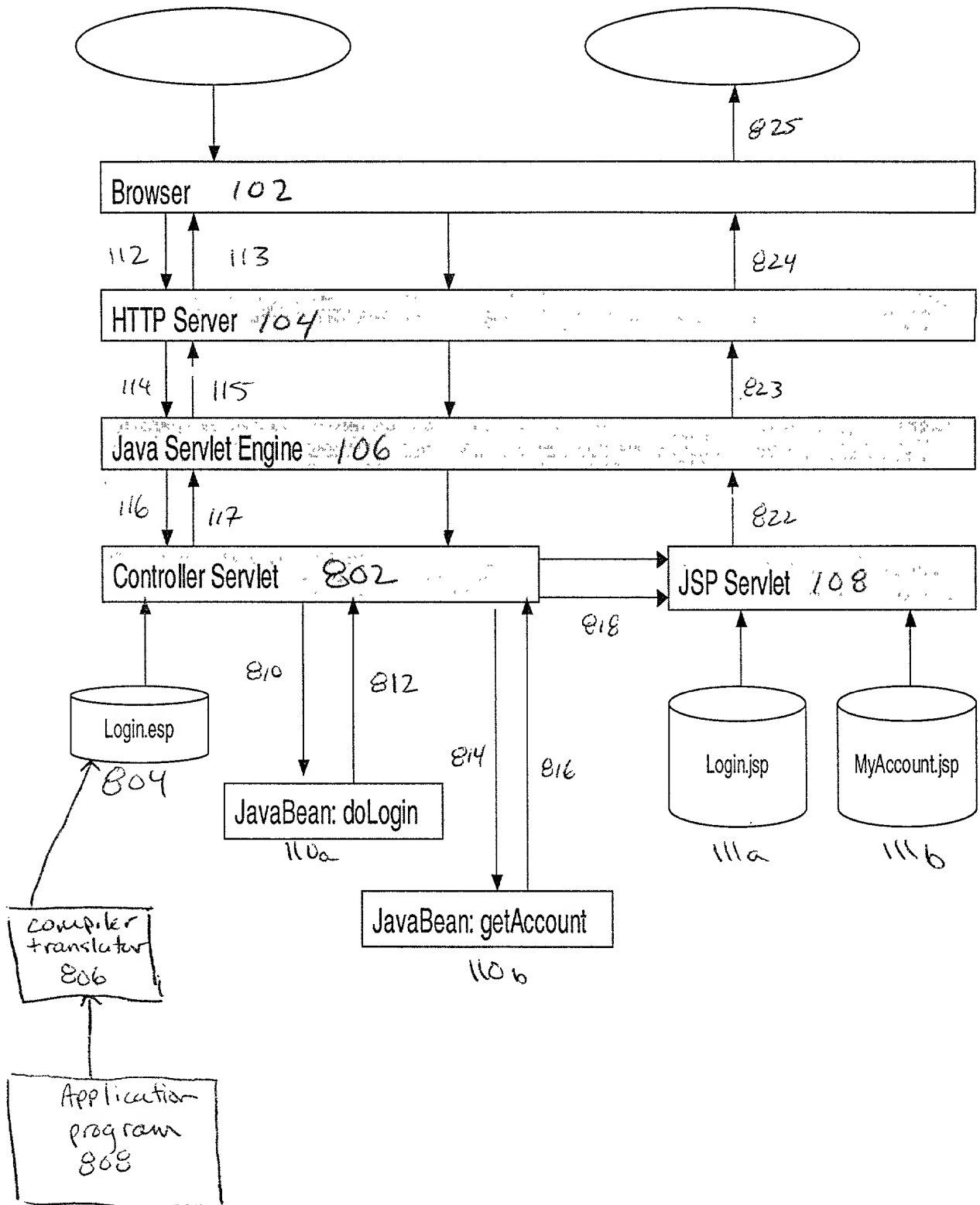


Figure 7

Fig. 8



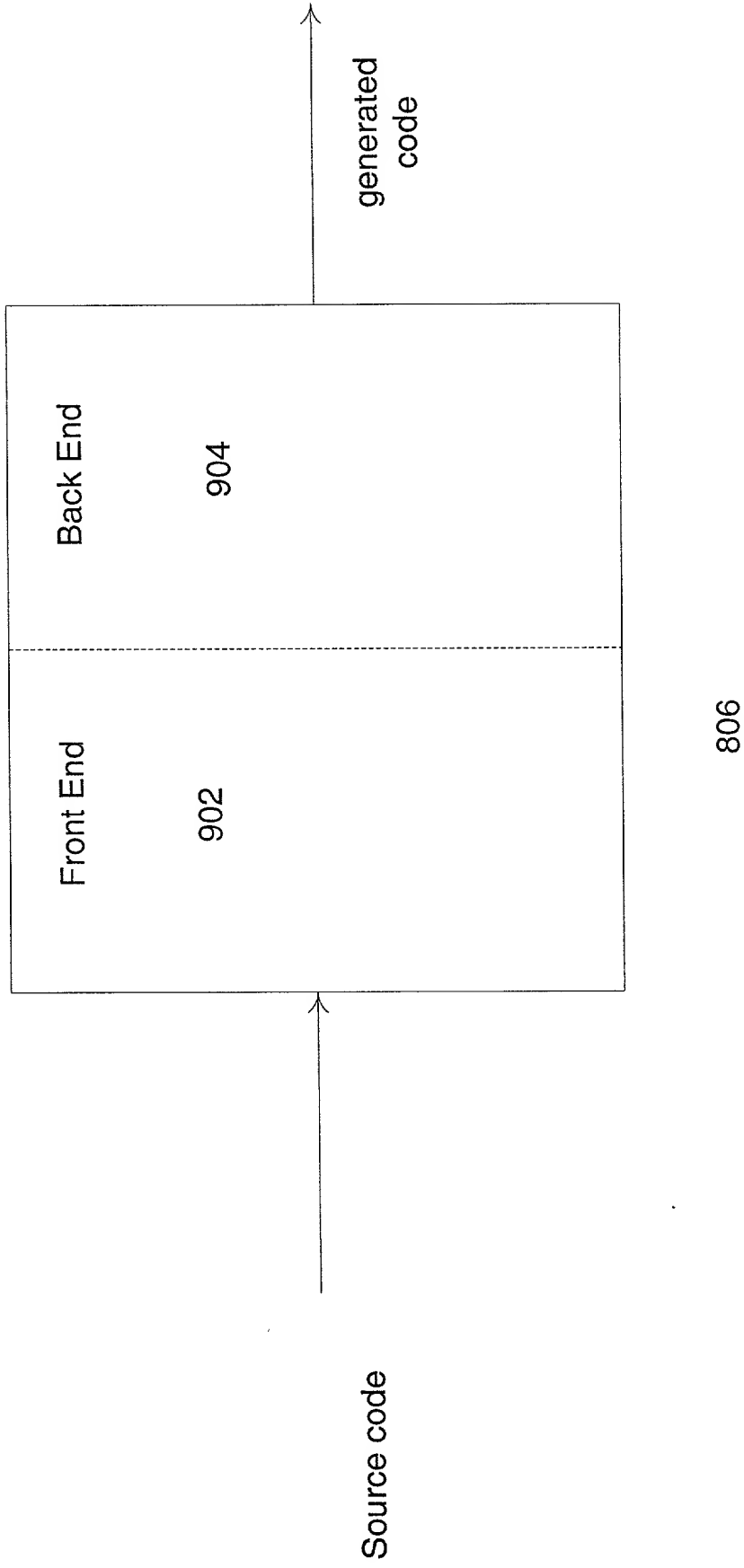
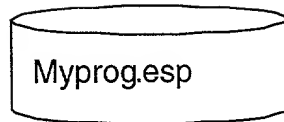


Figure 9

Fig. 10



Program Executor

Persistent Session Object
(managed by java container) 1002

<esp> 1004
Program space:Myprog.esp

Dataspace (persistent object item)

Dataspace: Myprog.esp

ProgramTree=...

ProgramPointer=...

InstructionStatus=...

S.T. Instruction =

<DisplayPage>

<RunPage>

A.S.T. Instruction =

<EndPage>

<Exit>

...

Dataspace: main 1026

s=...

i=...

...

Dataspace: sub

...

Program tree item

<esp> 1004

Program tree:Myprog.esp

<proc name="sub">

<seq>

...

<proc name="main">

<seq>

<set i=0>

[

<dowhile>

<condi < 3>

<seq>

<DisplayPage

Page = 'PageA.html">

<DisplayPage

Page = 'PageB.html">

<bean
Type="dbrecords"
Name="update">

<endPage
Page="default">

1006
1008
1020
1022
1024
1026
1028

Figure 11

